



# Health Care Financing Notes

Medicare: Inpatient Use of Short-Stay  
Hospitals, 1977

PUBS  
RA  
412  
.3  
M4332  
1977 short-  
stay hosp. use

Published by the Health Care Financing Administration

# Health Care Financing Notes

**Health Care Financing Notes** are published periodically by the Health Care Financing Administration's Office of Research, Demonstrations, and Statistics.

The Health Care Financing Administration was established in March 1977 to combine HEW's health financing and quality assurance programs into a single agency. HCFA is responsible for the operation of the Medicare and Medicaid programs, the PSRO program, Federal survey and certification efforts, and a variety of health care quality assurance activities.

The mission of the Health Care Financing Administration is to promote the timely delivery of appropriate, quality health care to its beneficiaries—approximately 45 million aged, disabled, and poor Americans. HCFA is committed to making beneficiaries aware of the services for which they are eligible, promoting the accessibility of those services and ensuring that HCFA policies and actions promote efficiency and quality within the total health care delivery system.

HCFA's Office of Research, Demonstrations, and Statistics (ORDS) conducts studies and projects that demonstrate and evaluate optional reimbursement, coverage, eligibility, and management alternatives to the present Federal programs. ORDS also assesses the impact of HCFA programs on health care costs, program expenditures, beneficiary access to services, health care providers, and the health care industry. In addition, ORDS monitors national health care expenditures and prices and provides actuarial analyses on the costs of current HCFA programs as well as the impact of possible legislative or administrative changes in the programs.

The purpose of the **Health Care Financing Notes** is to provide the public with descriptive program data or information as soon as it becomes available. Data is presented here in a brief, concise format. Frequently a more comprehensive analysis of the data may be available at a later time in one of the Health Care Financing Administration's other publications.

# Medicare: Inpatient Use of Short-Stay Hospitals, 1977

This Note presents for the first time preliminary estimates on the use, charges, and amounts reimbursed for Medicare aged and disabled Hospital Insurance (HI) beneficiaries discharged from participating short-stay hospitals during 1977.<sup>1</sup> Data are shown for aged and disabled beneficiaries by State of residence. Trend data for the years 1969 to 1977 are also shown.

Prior to 1973 persons aged 65 years and older constituted the entire Medicare population and thus, the HI program covered only these individuals. Starting July 1973, the Medicare HI benefits were extended to persons under 65 years of age. These were persons who were entitled to cash benefits for not less than 24 consecutive months under the disability insurance program and to persons with end-stage renal disease (ESRD). Highlights of the data follow:

## Trends, 1969-1977

### Aged

- Between 1969 and 1977, the number of aged short-stay hospital discharges increased from about 5.9 million to an estimated 7.7 million—an increase of about 32 percent. During this period, the total days of care (covered and non-covered) increased from 79.8 million to 84.8 million. However, the average length of stay per discharge decreased from 13.6 days to 11.0 days.
- Although, between 1969 and 1977, the total number of inpatient days covered by HI increased by about 6.5 percent, Medicare HI reimbursement for short-stay hospital services to the aged nearly tripled, rising from \$4.1 billion to \$12.1 billion, an average annual rate of increase of about 14.5 percent.
- The average reimbursement per discharge increased from \$706 to \$1,573 although the average length of covered stay per discharge decreased from 13.4 to 10.8 days. Covered days per stay are less than the total length of stay because not all days of hospitalization are covered by the program. In some cases, the total length of stay exceeded the benefits provided by the program or did not meet the other requirements for coverage under the program.

Prepared by Charles Helbing, Office of Research, Demonstrations, and Statistics, Health Care Financing Administration.

<sup>1</sup>For a detailed report of the conditions of participation for short-stay hospitals under Medicare, see "Regulations No. 5, Federal Health Insurance for the Aged", Title 20, Chapter III, part 405, Health Care Financing Administration.

## Trends, 1974-77

### Disabled

- Between 1974 (the first full year that the disabled were covered under HI) and 1977, the number of disabled short-stay hospital discharges increased 57 percent, from almost 596,000 to about 937,000. The total days of care used by the disabled increased from 6.6 million days to 9.6 million days, an increase of 45 percent. The average length of stay per discharge decreased from 11.2 to 10.3 days—a decrease of approximately 8 percent.
- Medicare HI reimbursement for short-stay hospital services to the disabled increased almost 131 percent between 1974 and 1977, from \$628 million to \$1.45 billion—an average annual rate of increase of about 32 percent.
- The average reimbursement per discharge increased from \$1,055 to \$1,547 despite the decrease from 10.8 to 10.1 days in the average length of covered stay.

## Utilization, Charges, and Reimbursements, 1977

### Aged

- In 1977, the aged used 84.8 million days of inpatient care. Medicare covered 83.5 million days and reimbursed about 73 percent (\$12.1 billion) of the \$16.6 billion in total charges incurred by the aged. The balance was made up by out-of-pocket payments by the aged for deductibles and coinsurance, services used by beneficiaries which are not covered by Medicare (e.g., television), and non-recoverable charges billed by the hospital since Medicare reimbursement is based on "reasonable costs."
- Among the four U.S. Census regions, utilization and charges for short-stay hospitals varied considerably. The average length of covered stay ranged from 8.8 days in the West to 13.0 days in the Northeast.
- The mean reimbursement per discharge ranged from \$1,263 in the South to \$1,963 in the Northeast. The mean reimbursement per covered day ranged from \$125 in the South to \$198 in the West.
- The Northeast, with about 21.8 percent of the discharges in the U.S. and the West with 15.3 percent accounted for a smaller percentage of the discharges than the proportion of the HI enrollment living in those regions (24.6 and 16.3 percent, respectively). The South, with 31.7 percent of the HI enrollment accounted for 34.4 percent of the discharges.
- Medicare program expenditures (\$12.1 billion) for aged short-stay hospital discharges accounted for close to 94 percent of the total HI reimbursements (\$12.9 billion) for the aged in 1977.<sup>2</sup>

<sup>2</sup>Source: HCFA unpublished data, current utilization tabulations.



## Utilization, Charges, and Reimbursement, 1977

### Disabled

- Disabled beneficiaries had an average length of covered stay of 10.1 days compared to 10.8 days for the aged. The average reimbursement per discharge was slightly less for the disabled than for the aged—\$1,547 compared to \$1,573.
- Among the four U.S. Census regions, the average length of covered stay for discharges of disabled beneficiaries ranged from 8.4 days in the West to 12.0 days in the Northeast; the mean reimbursement per discharge ranged from \$1,220 in the South to \$1,868 in the Northeast.
- Among the 50 States, the average length of covered stay ranged from 7.2 days in Montana to 12.8 days in New York and New Jersey. The mean reimbursement per discharge ranged from \$816 in Arkansas to \$2,671 in the District of Columbia.
- Medicare program expenditures (\$1.45 billion) for disabled beneficiaries discharged from short-stay hospitals accounted for over 92 percent of the total HI reimbursement (\$1.6 billion) for Medicare disability beneficiaries in 1977.<sup>3</sup>

### Sources and Limitations of Data

Data published in this *Note* were derived from billing forms for inpatient hospital services submitted for payment by participating short-stay hospitals.

Information from the billing forms is matched to the Health Insurance Eligibility master file which contains information on the beneficiaries' demographic characteristics. The discharge record is then matched to the Provider of Services master file which contains information on the type of characteristics of each participating hospital. Data presented in this *Note* are based on discharge records processed and recorded as of June 1978. As a result, the 1977 data should be regarded as "preliminary" since an estimated 3 percent of the discharge records for 1977 had not been processed for payment as of June 1978. The sample counts for 1977 have been multiplied by 5 to give an estimate of the total number of discharges recorded as of that date.

---

<sup>3</sup> Ibid.

## Standard Error Tables

Tables 4, 5, and 6 show approximate standard errors for estimates presented in this report. The standard error is a measure of sampling variability: the variation occurs by chance because a sample rather than the whole population is used. Approximate methods were used to calculate the standard errors at a reasonable cost. Thus, these tables should be used only as indicators of the order of magnitude of the standard errors for specific estimates.

### Definitions

**Covered day of care**—A day of inpatient skilled nursing care during which the services (determined to be medically necessary by the Professional Standards Review Organization or the Utilization Review Committee) covered by Medicare were furnished to a person eligible for HI benefits. The day of discharge is not counted as a day of care.

**Day of care**—A day of inpatient hospital care during which services were furnished to a person eligible for hospital insurance benefits. The day of discharge is not counted as a day of care.

**Discharge**—The formal release of a patient from a hospital. Discharges include persons who died during their hospitalization or were transferred to another hospital.

**Reimbursement**—Payments under the HI program which are shown in this *Note* are based on interim reimbursement rates reported on processed bills. The interim rates are established to reflect current costs as closely as possible. These are usually established as a per diem amount or as a percentage of total charges. Figures shown exclude amounts for which the patient is responsible such as deductibles, coinsurance, and charges for noncovered services. The final amount of reimbursement due under Medicare to each provider of medical services is determined after the end of the fiscal year on the basis of the providers' audited reasonable costs of operation.

**Short-stay hospitals**—Those hospitals where the average length of stay is less than 30 days. General and special hospitals are included in this category.

**State**—Refers to the State where the beneficiary is living, not the State where he or she receives services.

**Table 1**  
**Use of Short Stay Hospital Services by Medicare Hospital Insurance Beneficiaries: Number of Discharges, Days of Care, Charges, and Reimbursement by Type of Beneficiary, 1969-77**

Calendar Year	Number of Discharges	Days of Care					Charges			Reimbursement		
		Total Days		Covered Days			Amount (In Thou-sands)	Per Dis-charge	Per Day	Amount (In Thou-sands)	Per Dis-charge	Percent of Total Charges
		Total (In Thou-sands)	Per Dis-charge	Total (In Thou-sands)	Per Dis-charge	Percent of Total Days						
All Beneficiaries												
1969 <sup>1</sup>	5,854,780	79,761	13.6	78,356	13.4	98.2	\$ 5,260,606	\$ 899	\$ 66	\$ 4,132,826	\$ 706	78.5
1970 <sup>1</sup>	5,920,320	77,652	13.1	75,914	12.8	97.7	5,908,690	998	76	4,517,654	763	76.4
1971 <sup>1</sup>	6,111,835	77,395	12.7	75,313	12.3	97.3	6,733,494	1,102	87	5,129,245	839	76.1
1972 <sup>1</sup>	6,495,050	79,809	12.3	76,788	11.8	96.2	7,560,301	1,164	95	5,709,189	879	75.5
1973	6,861,125	81,380	11.9	77,663	11.3	95.4	8,269,144	1,207	102	6,253,014	911	75.6
1974	7,012,555	81,307	11.6	79,418	11.3	97.7	9,722,750	1,386	120	7,309,058	1,042	75.2
1975	7,413,490	84,140	11.3	82,734	11.2	98.3	12,309,324	1,660	146	9,209,250	1,242	74.8
1976	8,320,120	93,516	11.2	91,993	11.1	98.4	15,971,925	1,920	171	11,895,771	1,430	74.5
1977 <sup>2</sup>	8,645,490	94,443	10.9	92,931	10.7	98.4	18,646,394	2,157	197	13,578,140	1,571	72.8
Aged												
1969	5,854,780	79,761	13.6	78,356	13.4	98.2	5,260,606	899	66	4,132,826	706	78.5
1970	5,920,320	77,652	13.1	75,914	12.8	97.7	5,908,690	998	76	4,517,654	763	76.4
1971	6,111,835	77,395	12.7	75,313	12.3	97.3	6,733,494	1,102	87	5,129,245	839	76.1
1972	6,495,050	79,809	12.3	76,788	11.8	96.2	7,560,301	1,164	95	5,709,189	879	75.5
1973	6,628,105	78,838	11.9	75,324	11.4	95.6	8,002,424	1,209	102	6,052,260	915	75.6
1974	6,416,840	74,664	11.6	72,995	11.4	97.8	8,865,347	1,382	119	6,680,648	1,041	75.4
1975	6,697,055	76,457	11.4	75,213	11.2	98.4	11,088,929	1,656	145	8,319,313	1,242	75.0
1976	7,461,725	84,474	11.3	83,139	11.1	98.4	14,303,731	1,917	169	10,681,706	1,432	74.7
1977 <sup>2</sup>	7,708,245	84,819	11.0	83,492	10.8	98.4	16,614,165	2,155	196	12,127,858	1,573	73.0
Disabled												
1973	233,020	2,542	10.9	2,339	10.0	92.0	266,720	1,145	105	200,754	862	75.3
1974	595,715	6,643	11.2	6,423	10.8	96.7	857,403	1,439	129	628,410	1,055	73.3
1975	716,435	7,683	10.7	7,521	10.5	97.9	1,220,395	1,703	159	889,937	1,242	72.9
1976	858,395	9,042	10.5	8,854	10.3	97.9	1,668,194	1,943	184	1,214,065	1,414	72.8
1977 <sup>2</sup>	937,245	9,624	10.3	9,439	10.1	98.1	2,032,229	2,168	211	1,450,282	1,547	71.4

<sup>1</sup> Prior to 1973, services were covered only for beneficiaries aged 65 and over. Effective July 1, 1973, HI benefits were extended to persons under 65 years of age who were entitled to cash benefits for not less than 24 consecutive months under the disability insurance program and to persons with end-stage renal disease (ESRD).

<sup>2</sup> Preliminary estimates.

**Table 2**  
**Use of Short Stay Hospital Services by Aged Medicare Hospital Insurance Beneficiaries: Number of Discharges, Days of Care, Charges, and Reimbursement by Region, Division, and State, 1977**

Area of Residence	Number of Discharges	Days of Care					Charges			Reimbursement		
		Total Days		Covered Days			Amount (In Thou-sands)	Per Dis-charge	Per Day	Amount (In Thou-sands)	Per Dis-charge	Percent of Total Charges
		Total (In Thou-sands)	Per Dis-charge	Total (In Thou-sands)	Per Dis-charge	Percent of Total Days						
All Areas	7,708,245	84,819	11.0	83,492	10.8	98.4	\$16,614,165	\$2,155	\$196	\$12,127,858	\$1,573	73.0
United States	7,656,230	84,246	11.0	82,928	10.8	98.4	16,550,880	2,162	196	12,090,152	1,579	73.0
Northeast	1,671,735	22,444	13.4	21,794	13.0	97.1	4,757,911	2,846	212	3,281,278	1,963	69.0
North Central	2,174,290	24,383	11.2	24,108	11.1	98.9	4,487,866	2,064	184	3,424,762	1,575	76.3
South	2,635,455	26,917	10.2	26,651	10.1	99.0	4,637,624	1,760	172	3,327,641	1,263	71.8
West	1,173,245	10,487	8.9	10,360	8.8	98.8	2,664,447	2,271	254	2,054,244	1,751	77.1
New England	435,930	5,269	12.1	5,110	11.7	97.0	1,088,477	2,497	207	862,144	1,978	79.2
Maine	46,380	472	10.2	464	10.0	98.2	89,148	1,922	189	72,061	1,554	80.8
New Hampshire	31,680	326	10.3	320	10.1	98.0	54,981	1,736	169	43,761	1,381	79.6
Vermont	19,730	214	10.8	210	10.6	98.1	33,062	1,676	155	26,644	1,350	80.6
Massachusetts	215,640	2,825	13.1	2,700	12.5	95.5	604,523	2,803	214	470,856	2,184	77.9
Rhode Island	31,795	371	11.7	368	11.6	99.2	76,641	2,410	207	61,750	1,942	80.6
Connecticut	90,705	1,061	11.7	1,050	11.6	98.9	230,122	2,537	217	187,072	2,062	81.3
Middle Atlantic	1,235,805	17,175	13.9	16,684	13.5	97.1	3,669,434	2,969	214	2,419,134	1,958	65.9
New York	574,740	8,598	15.0	8,295	14.4	96.5	1,922,243	3,345	224	1,285,862	2,237	66.9
New Jersey	229,145	3,177	13.9	3,097	13.5	97.5	659,123	2,876	207	420,606	1,836	63.8
Pennsylvania	431,920	5,400	12.5	5,291	12.3	98.0	1,088,069	2,519	202	712,666	1,650	65.5
East North Central	1,383,910	16,209	11.7	16,039	11.6	98.9	3,148,753	2,275	194	2,379,289	1,719	75.6
Ohio	349,275	4,204	12.0	4,178	12.0	99.4	777,350	2,226	185	574,594	1,645	73.9
Indiana	180,025	2,043	11.3	2,019	11.2	98.8	322,199	1,790	158	266,086	1,478	82.6
Illinois	406,210	4,884	12.0	4,794	11.8	98.2	1,024,502	2,522	210	739,849	1,821	72.2
Michigan	276,350	3,229	11.7	3,211	11.6	99.5	702,714	2,543	218	537,079	1,943	76.4
Wisconsin	172,050	1,850	10.8	1,836	10.7	99.3	321,987	1,871	174	261,681	1,521	81.3
West North Central	790,380	8,174	10.3	8,069	10.2	98.7	1,339,113	1,694	164	1,045,473	1,323	78.1
Minnesota	162,585	1,657	10.2	1,629	10.0	98.3	281,369	1,731	170	236,308	1,453	84.0
Iowa	141,800	1,377	9.7	1,364	9.6	99.0	218,315	1,540	159	177,371	1,251	81.2
Missouri	219,135	2,499	11.4	2,474	11.3	99.0	421,281	1,922	169	312,397	1,426	74.2
North Dakota	33,270	309	9.3	304	9.1	98.2	50,803	1,527	164	41,655	1,252	82.0
South Dakota	36,440	337	9.2	332	9.1	98.6	49,679	1,363	148	39,850	1,094	80.2
Nebraska	76,620	777	10.1	763	10.0	98.1	127,120	1,659	164	91,717	1,197	72.1
Kansas	120,530	1,217	10.1	1,203	10.0	98.9	190,548	1,581	157	146,166	1,213	76.7
South Atlantic	1,211,910	13,044	10.8	12,861	10.6	98.6	2,381,331	1,965	183	1,729,933	1,427	72.6
Delaware	15,385	187	12.2	184	12.0	98.5	36,037	2,342	193	28,099	1,826	78.0
Maryland	96,000	1,243	12.9	1,232	12.8	99.1	252,319	2,628	203	206,902	2,155	82.0
Dist. of Columbia	16,570	241	14.6	227	13.7	94.0	54,203	3,271	224	43,234	2,609	79.8
Virginia	144,550	1,813	12.5	1,777	12.3	98.0	294,210	2,035	162	200,822	1,389	68.3
West Virginia	80,965	873	10.8	860	10.6	98.4	134,025	1,655	153	89,592	1,107	66.8
North Carolina	168,800	1,926	11.4	1,883	11.2	97.8	260,419	1,543	135	200,161	1,186	76.9
South Carolina	78,180	838	10.7	804	10.3	95.9	121,895	1,559	145	90,429	1,157	74.2
Georgia	159,010	1,444	9.1	1,433	9.0	99.2	245,729	1,545	170	177,911	1,119	72.4
Florida	452,450	4,479	9.9	4,462	9.9	99.6	982,495	2,171	219	692,781	1,531	70.5



Table 2 (Continued)

Use of Short Stay Hospital Services by Aged Medicare Hospital Insurance Beneficiaries: Number of Discharges, Days of Care, Charges, and Reimbursement by Region, Division, and State, 1977

Area of Residence	Days of Care						Charges			Reimbursement		
	Number of Discharges	Total Days		Covered Days			Amount (In Thou-sands)	Per Dis-charge	Per Day	Amount (In Thou-sands)	Per Dis-charge	Percent of Total Charges
		Total (In Thou-sands)	Per Dis-charge	Total (In Thou-sands)	Per Dis-charge	Percent of Total Days						
East South Central	569,680	5,791	10.2	5,752	10.1	99.3	\$ 917,146	\$1,610	\$158	\$ 612,246	\$1,075	66.8
Kentucky	141,480	1,442	10.2	1,432	10.1	99.3	207,101	1,464	144	156,004	1,103	75.3
Tennessee	168,725	1,751	10.4	1,734	10.3	99.1	294,381	1,745	168	186,958	1,108	63.5
Alabama	149,125	1,464	9.8	1,460	9.8	99.8	261,275	1,752	179	164,395	1,102	62.9
Mississippi	110,350	1,135	10.3	1,126	10.2	99.2	154,389	1,399	136	104,888	951	67.9
West South Central	853,865	8,083	9.5	8,038	9.4	99.5	1,339,147	1,568	166	985,463	1,154	73.6
Arkansas	117,370	1,066	9.1	1,062	9.0	99.6	155,973	1,329	146	104,615	891	67.1
Louisiana	134,440	1,321	9.8	1,315	9.8	99.5	219,141	1,630	166	148,094	1,102	67.6
Oklahoma	131,750	1,198	9.1	1,190	9.0	99.3	215,717	1,637	180	160,303	1,217	74.3
Texas	470,305	4,497	9.6	4,471	9.5	99.4	748,315	1,591	166	572,450	1,217	76.5
Mountain	307,870	2,816	9.1	2,775	9.0	98.5	559,490	1,817	199	418,064	1,358	74.7
Montana	32,110	267	8.3	261	8.1	97.8	44,583	1,388	167	34,337	1,069	77.0
Idaho	30,215	244	8.1	241	8.0	98.7	44,453	1,471	183	34,870	1,154	78.4
Wyoming	13,550	117	8.6	116	8.6	99.2	17,966	1,326	154	13,830	1,021	77.0
Colorado	80,555	781	9.7	776	9.6	99.4	155,357	1,929	199	114,208	1,418	73.5
New Mexico	32,320	287	8.9	279	8.6	97.5	53,489	1,655	187	41,268	1,277	77.2
Arizona	75,755	755	10.0	741	9.8	98.2	160,364	2,117	213	117,471	1,551	73.3
Utah	25,620	209	8.2	204	8.0	97.4	41,374	1,615	198	32,368	1,263	78.2
Nevada	17,745	157	8.9	157	8.8	99.6	41,904	2,361	267	29,712	1,674	70.9
Pacific	865,375	7,671	8.9	7,586	8.8	98.9	2,104,957	2,432	274	1,636,181	1,891	77.7
Washington	118,470	910	7.7	905	7.6	99.5	198,996	1,680	219	159,186	1,344	80.0
Oregon	83,405	688	8.2	681	8.2	99.1	153,260	1,838	223	129,748	1,556	84.7
California	645,565	5,893	9.1	5,827	9.0	98.9	1,711,526	2,651	290	1,314,113	2,036	76.8
Alaska	2,655	21	7.9	21	7.9	99.7	6,374	2,401	302	5,290	1,992	83.0
Hawaii	15,280	160	10.5	151	9.9	94.7	34,801	2,278	218	27,845	1,822	80.0
Other Areas	52,015	573	11.2	564	10.8	98.4	63,287	1,217	110	37,735	725	59.6
Puerto Rico	49,370	542	11.0	534	10.8	98.5	57,500	1,165	106	33,579	680	58.4
Virgin Islands	660	10	15.0	9	13.1	87.3	974	1,476	99	635	962	65.2
Guam	410	5	11.4	5	11.3	99.4	748	1,824	161	650	1,586	87.0
Foreign	1,510	16	10.6	16	10.6	99.9	4,001	2,649	250	2,798	1,853	69.9
Other Outlying Area	65	1	6.5	1	6.5	100.0	64	978	150	43	658	67.3
Residence Unknown	1,505	15	10.0	15	10.0	99.3	3,030	2,013	201	2,226	1,479	73.5

<sup>1</sup> Greater than 0 but less than 500.

**Table 3**  
**Use of Short Stay Hospital Services by Disabled Medicare Hospital Insurance Beneficiaries: Number of Discharges, Days of Care, Charges, and Reimbursement by Region, Division, and State, 1977**

Area of Residence	Number of Discharges	Days of Care					Charges			Reimbursement		
		Total Days		Covered Days			Amount (In Thou-sands)	Per Dis-charge	Per Day	Amount (In Thou-sands)	Per Dis-charge	Percent of Total Charges
		Total (In Thou-sands)	Per Dis-charge	Total (In Thou-sands)	Per Dis-charge	Percent of Total Days						
All Areas	937,245	9,624	10.3	9,439	10.1	98.1	\$2,032,229	\$2,168	\$211	\$1,450,282	\$1,547	71.3
United States	931,245	9,564	10.3	9,380	10.1	98.1	2,024,528	2,174	212	1,445,626	1,552	71.4
Northeast	184,185	2,281	12.4	2,213	12.0	97.0	508,200	2,759	223	344,060	1,868	67.7
North Central	228,480	2,493	10.9	2,446	10.7	98.1	509,203	2,229	204	381,136	1,668	74.8
South	362,695	3,451	9.5	3,413	9.4	98.8	637,471	1,758	185	442,380	1,220	69.4
West	153,615	1,311	8.5	1,284	8.4	97.9	362,529	2,360	277	273,250	1,779	75.4
New England	42,920	469	10.9	458	10.7	97.7	104,523	2,435	223	82,407	1,920	78.8
Maine	5,560	54	9.7	53	9.5	98.1	10,686	1,922	198	8,772	1,578	82.1
New Hampshire	3,280	31	9.4	31	9.3	99.0	5,482	1,671	177	4,444	1,355	81.1
Vermont	2,270	22	9.8	22	9.6	98.3	3,803	1,675	172	3,100	1,365	81.5
Massachusetts	19,260	223	11.6	215	11.2	96.8	52,156	2,708	234	39,916	2,073	76.5
Rhode Island	3,540	38	10.6	38	10.6	99.7	8,505	2,402	226	6,858	1,937	80.6
Connecticut	9,010	102	11.3	100	11.1	98.2	23,890	2,651	235	19,317	2,144	80.9
Middle Atlantic	141,265	1,812	12.8	1,755	12.4	96.8	403,677	2,858	223	261,653	1,852	64.8
New York	62,095	829	13.3	797	12.8	96.2	189,725	3,055	229	126,438	2,036	66.6
New Jersey	28,150	368	13.1	360	12.8	97.8	80,996	2,877	220	50,910	1,809	62.9
Pennsylvania	51,020	616	12.1	598	11.7	97.1	132,956	2,606	216	84,305	1,652	63.4
East North Central	160,750	1,811	11.3	1,779	11.1	98.2	383,460	2,385	212	283,948	1,766	74.0
Ohio	43,315	500	11.5	494	11.4	98.9	98,815	2,281	198	71,395	1,648	72.3
Indiana	22,765	250	11.0	245	10.7	97.7	44,489	1,954	178	35,583	1,563	80.0
Illinois	40,545	465	11.5	450	11.1	96.7	104,936	2,588	226	73,245	1,807	69.8
Michigan	37,965	424	11.2	421	11.1	99.1	101,801	2,681	240	76,819	2,023	75.5
Wisconsin	16,160	171	10.6	169	10.5	99.0	33,420	2,068	195	26,907	1,665	80.5
West North Central	67,730	684	10.1	668	9.9	97.6	125,742	1,857	184	97,186	1,435	77.3
Minnesota	12,855	136	10.6	130	10.1	95.8	26,572	2,067	196	22,728	1,768	85.5
Iowa	11,780	112	9.5	109	9.3	97.6	19,744	1,676	177	15,890	1,349	80.5
Missouri	23,710	247	10.4	243	10.3	98.5	44,803	1,890	181	32,459	1,369	72.4
North Dakota	2,585	24	9.4	24	9.2	98.0	4,454	1,723	183	3,659	1,415	82.1
South Dakota	2,660	24	9.1	24	9.0	98.5	4,382	1,648	181	3,501	1,316	79.9
Nebraska	5,220	54	10.4	53	10.2	97.5	10,453	2,003	192	7,229	1,385	69.2
Kansas	8,920	86	9.7	84	9.4	97.8	15,334	1,719	178	11,721	1,314	76.4
South Atlantic	175,820	1,754	10.0	1,729	9.8	98.6	335,133	1,906	191	237,533	1,351	70.9
Delaware	1,875	23	12.2	22	11.9	97.7	4,484	2,392	196	3,566	1,902	79.5
Maryland	11,385	141	12.4	139	12.3	99.1	32,204	2,829	229	25,728	2,260	79.9
Dist. of Columbia	1,830	24	13.4	22	12.2	91.0	6,195	3,385	253	4,888	2,671	78.9
Virginia	22,865	262	11.5	255	11.2	97.5	47,360	2,071	181	30,060	1,315	63.5
West Virginia	14,010	130	9.3	130	9.2	99.4	22,716	1,621	174	14,330	1,023	63.1
North Carolina	29,745	309	10.4	304	10.2	98.2	48,511	1,631	157	36,648	1,232	75.5
South Carolina	15,340	145	9.5	142	9.3	97.6	22,870	1,491	157	16,763	1,093	73.3
Georgia	32,760	278	8.5	277	8.4	99.4	51,486	1,572	185	36,346	1,109	70.6
Florida	46,010	441	9.6	438	9.5	99.4	99,306	2,158	225	69,204	1,504	69.7
East South Central	89,550	828	9.2	822	9.2	99.4	144,458	1,613	175	92,696	1,035	64.2
Kentucky	19,170	177	9.2	177	9.2	99.6	28,073	1,464	158	20,880	1,089	74.4
Tennessee	28,235	265	9.4	264	9.3	99.3	49,342	1,748	186	29,480	1,044	59.7
Alabama	23,960	222	9.3	221	9.2	99.6	42,305	1,766	191	26,710	1,115	63.1
Mississippi	18,185	163	9.0	161	8.9	99.0	24,738	1,360	152	15,626	859	63.2
West South Central	97,325	871	9.0	861	8.9	98.9	157,881	1,622	181	112,152	1,152	71.0
Arkansas	15,675	127	8.1	125	8.0	98.7	20,182	1,288	159	12,789	816	63.4
Louisiana	18,935	172	9.1	170	9.0	99.1	30,251	1,598	176	19,175	1,013	63.4
Oklahoma	14,495	122	8.4	122	8.4	99.8	25,157	1,736	206	18,430	1,271	73.3
Texas	48,220	450	9.3	444	9.2	98.6	82,291	1,707	183	61,757	1,281	75.0



Table 3 (Continued)

Use of Short Stay Hospital Services by Disabled Medicare Hospital Insurance Beneficiaries: Number of Discharges, Days of Care, Charges, and Reimbursement by Region, Division, and State, 1977

Area of Residence	Number of Discharges	Days of Care					Charges			Reimbursement		
		Total Days		Covered Days			Amount (In Thousands)	Per Dis-charge	Per Day	Amount (In Thousands)	Per Dis-charge	Percent of Total Charges
		Total (In Thou-sands)	Per Dis-charge	Total (In Thou-sands)	Per Dis-charge	Percent of Total Days						
Mountain	35,275	310	8.8	301	8.5	97.2	\$ 68,600	\$1,945	\$221	\$ 48,865	\$1,385	71.2
Montana	3,425	29	8.5	25	7.2	84.2	4,686	1,368	161	3,536	1,033	75.5
Idaho	3,310	27	8.2	27	8.1	99.1	4,961	1,499	183	3,987	1,204	80.4
Wyoming	1,185	10	8.6	10	8.6	100.0	1,602	1,352	157	1,306	1,102	81.5
Colorado	8,785	78	8.9	77	8.8	99.0	17,478	1,990	224	11,694	1,331	66.9
New Mexico	3,715	30	8.1	30	8.0	98.9	6,942	1,869	231	5,354	1,441	77.1
Arizona	9,485	90	9.5	88	9.3	97.7	20,988	2,213	233	14,600	1,539	69.6
Utah	2,670	22	8.2	22	8.1	98.3	5,170	1,936	235	3,775	1,414	73.0
Nevada	2,700	24	8.7	23	8.6	99.1	6,773	2,508	288	4,613	1,708	68.1
Pacific	118,340	1,000	8.5	982	8.3	98.2	293,929	2,484	294	224,384	1,896	76.3
Washington	12,680	102	8.0	101	7.9	99.2	23,455	1,850	231	18,436	1,454	78.6
Oregon	9,445	76	8.0	74	7.8	98.0	18,067	1,913	239	15,479	1,639	85.7
California	94,010	801	8.5	787	8.4	98.2	246,874	2,626	308	186,084	1,979	75.4
Alaska	385	3	8.2	3	8.2	100.0	1,122	2,915	353	926	2,405	82.5
Hawaii	1,820	19	10.3	17	9.3	90.2	4,411	2,424	236	3,460	1,901	78.4
Other Areas	6,000	59	9.8	58	9.7	99.0	7,703	1,284	131	4,655	776	60.4
Puerto Rico	5,625	56	9.9	55	9.7	98.0	6,794	1,208	122	3,958	704	58.3
Virgin Islands	55	<sup>1</sup>	6.1	<sup>1</sup>	6.1	100.0	44	795	131	27	490	61.6
Guam	90	1	14.6	1	14.6	99.6	339	3,768	258	282	3,134	83.2
Foreign	175	2	10.9	2	10.9	100.0	499	2,849	261	366	2,094	73.5
Other Outlying Area	2,270	25	11.1	24	10.7	96.9	7,124	3,138	283	4,802	2,116	67.4
Residence Unknown	55	<sup>1</sup>	8.1	<sup>1</sup>	8.1	100.0	27	484	60	22	405	83.7

<sup>1</sup>Greater than 0 but less than 500.

**Table 4**  
**Approximate Standard Error of Estimated Numbers of**  
**Discharges and Estimated Number of Persons Using**  
**Services**

Estimated Number Discharges or Number of Persons	Standard Error	
	Discharges	Persons
10,000	300	210
25,000	480	340
50,000	670	480
100,000	940	690
150,000	1,100	850
200,000	1,300	990
250,000	1,500	1,100
500,000	2,100	1,700
750,000	2,600	2,100
1,000,000	3,100	2,500
2,000,000	4,900	4,000
3,000,000	6,600	5,300
4,000,000	8,300	6,600
5,000,000	10,000	7,900
6,000,000	12,000	9,100
7,000,000	13,000	10,000
8,000,000	14,000	11,000

**Table 5**  
**Approximate Standard Error of Estimated Hospital**  
**Reimbursement Under Medicare**

Estimated Reimbursement	Standard Error
1,000,000,000	4,100,000
2,000,000,000	6,020,000
3,000,000,000	7,400,000
4,000,000,000	8,440,000
5,000,000,000	9,200,000
6,000,000,000	9,740,000
8,000,000,000	10,200,000
10,000,000,000	12,200,000
12,000,000,000	13,400,000

**Table 6**  
**Approximate Standard Error of Days Per Discharge (Average Length of Stay)**

Days per Discharge	Base of Rate (number of discharges in thousands)									
	10	25	50	100	200	500	1,000	2,000	4,000	6,000
7	.26	.16	.12	.083	.059	.038	.027	.019	.015	.012
8	.28	.17	.12	.088	.063	.040	.029	.021	.016	.013
9	.29	.19	.13	.093	.066	.043	.031	.022	.017	.015
10	.31	.20	.14	.098	.070	.045	.032	.024	.018	.016
11	.32	.21	.15	.10	.074	.047	.034	.025	.019	.017
12	.34	.22	.15	.11	.077	.050	.036	.027	.021	.018
13	.36	.23	.16	.11	.081	.052	.038	.028	.022	.020
14	.37	.24	.17	.12	.085	.054	.040	.030	.023	.021
15	.39	.25	.18	.12	.088	.057	.041	.031	.025	.022
16	.41	.26	.18	.13	.092	.059	.043	.033	.026	.024
17	.43	.27	.19	.13	.096	.062	.045	.034	.027	.025
18	.44	.28	.20	.14	.10	.064	.047	.036	.029	.026
19	.46	.29	.21	.15	.10	.067	.049	.037	.030	.028
20	.48	.30	.21	.15	.11	.069	.051	.039	.031	.029

# Health Care Financing Notes

**U.S. Department of Health,  
Education, and Welfare**

*Patricia Roberts Harris, Secretary*

**Health Care Financing Administration**

*Leonard D. Schaeffer, Administrator*

**Office of Research, Demonstrations, and  
Statistics**

*James M. Kaple, Acting Director*

*Diane Bolay, Director, Program Planning  
and Support*

*Karen Pelham O'Steen, Research Publications  
Coordinator*

*Judy Folkenberg, Writer-editor*

*Cynthia Dingle, Editorial Assistant*

Send changes of address or requests for this publication to:  
ORDS Publications, Rm 1E9 Oak Meadows Building, 6340 Security  
Blvd., Baltimore, MD 21235.



DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE  
HEALTH CARE FINANCING ADMINISTRATION  
BALTIMORE, MARYLAND 21235

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID  
U. S. DEPARTMENT OF H.E.W.  
HEW-397



3 8095 00011868 3